

# ROYAL ASTRONOMICAL SOCIETY.

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No. I.

CAPT. W. H. SMYTH, R.N., Vice-President, in the Chair.

The Rev. J. Slatter, M.A. of Rose Hill, near Oxford, was balloted for, and duly elected a Fellow of the Society.

## FLORA.

*Discovered* at Mr. Bishop's Observatory, South Villa, Regent's Park, by Mr. Hind.

“ On October 18, while comparing the excellent chart of Professor Knorre, hour iv. with the heavens, I discovered what seemed to be a star, ninth magnitude, near Bessel, v. 48, unmarked on the map; and from my acquaintance with this part of the heavens I had no hesitation in deciding upon its nature. A few hours' observation proved it to be a new planet, the eighth of the remarkable group between the orbits of *Mars* and *Jupiter*. Since the epoch of discovery, the brightness of the planet has considerably increased, and now equals that of a star of the eighth magnitude.

“ At Mr. Bishop's request, Sir John Herschel has named the planet, *Flora*, with a flower,” (*a rose?*) “ for the symbol.”

## Observations.

CAMBRIDGE.				(Professor Challis.)			
Greenwich M. T.				R. A.	N. P. D.	No. of Measures.	Reference Star.
1847.	h	m	s	h	m	s	
Oct. 19	9	51	50.3	5	3	49.48	75 57 23.1 1 Bessel, v. 48
20	9	57	58.9	3	58.80	58 28.7	10 —
21	11	59	44.2	4	5.95	59 35.4	8 —
	15	3	15.4	4	6.12	75 59 43.0	Meridian
24	12	2	14.5	4	10.54	76 2 31.9	6 —
25	10	47	17.6	4	7.18	3 27.9	6 —
26	11	53	0.7	4	0.95	4 27.3	4 —
Nov. 1	11	5	0.3	2	33.04	9 25.8	4 —
	11	26	30.4	5	2	32.93	9 26.0 6 Bessel, v. 11
9	10	7	17.2	4	58	20.31	13 22.4 10 Bessel, iv. 1312
	13	43	25.7	58	13.11	13 28.4	Meridian
10	13	38	47.4	4	57	30.61	76 13 40.3 —

“The extra-meridional observations were taken with the North-umberland equatoreal. The following is the assumed mean place, Jan. 1, 1847, of Bessel, v. 48, as determined by two circle and four transit observations:—

$$\text{R. A.} = 5^{\text{h}} 3^{\text{m}} 17^{\text{s}}.60 \quad \text{N. P. D.} = 75^{\circ} 49' 45''.9$$

The other two stars were taken from Weisse's Catalogue.”

MARKREE.	Large Equatoreal.*		{ E. J. Cooper, Esq. & Mr. Graham.		
Greenwich M. T.	R. A.	Parallax.	Decl.	Parallax.	Obs.
Oct. 27.493196	5 <sup>h</sup> 3 <sup>m</sup> 53 <sup>s</sup> .20—[8.4960]	<i>p</i>	+ 13 54 40".0 + [9.8444]	<i>p</i>	16
Nov. 2.606546	2 5.72—[7.4348]		49 45.7 + [9.8113]		11
5.481421	5 0 43.57—[8.4590]		+ 13 48 7.0 + [9.8387]		10

The assumed apparent places of stars of comparison are

Oct. 27	5 <sup>h</sup> 3 <sup>m</sup> 46 <sup>s</sup> .32	+ 13 44 2".2	Weisse's Bessel, v. 54
Nov. 2	5 1 39.79	+ 13 47 48".1	— v. 11
5	5 0 41.93	+ 13 42 59.8	Lalande, 9671
	{ 5 1 39.21	+ 13 47 53".0	Lalande, 9714
	{ 5 1 39.86	48".0	Weisse's Bessel, v. 11

#### BERLIN.

(Professor Encke.)

	Berlin M. T.	R. A.	Decl.	
1847.	h m s	° ' "	° ' "	
Oct. 24	10 6 4.6	76 2 47.85	+ 13 57 31.22	
	11 20 5.9	48.02	27.75	
	13 19 20.2	42.30	25.03	
	15 28 40.9	37.85	21.05	
25	14 3 6.1	76 1 47.2	+ 13 56 25.3	Doubtful.
	14 48 49.8	49.2	18.0	Merid. Obs.

#### ALTONA.

Merid. Circle.

{ Prof. Schumacher  
& M. Petersen.

	Altona M. T.	R. A.	Decl.
1847.	h m s	° ' "	° ' "
Oct. 22	15 0 37.9	76 2 28.5	+ 13 59 17.8
25	14 48 46.8	1 33.9	56 20.3
26	14 44 44.7	76 0 0.0	55 24.7
31	14 23 56.7	75 42 50.3	+ 13 51 11.1

\* To obtain a large field with the Markree Equatoreal, Mr. Graham has applied a reticule, consisting of a square formed by four steel bars. This is adjusted by making a star traverse the diagonal. The occultations of the planet and compared stars by the bars furnished the data of the computed places. The stars of comparison were carefully selected before observing, a very necessary precaution.

The horizontal parallax, *p*, is expressed in seconds of space throughout the number.

HAMBURG.				(M. Rümker.)			
1847.	Hamburg M. T.			R. A.	Decl.	No. Obs.	
	h	m	s	° ' "	° ' "		
Oct. 22	11	13	47.4	76 2 21.2	+ 13 59 39.2	8	
24	9	50	51.2	2 50.0	57 44.3	2	
25	10	41	35.3	1 50.9	56 30.5	6	
	14	48	46.3	1 31.2	56 19.1	Merid. Circle.	
26	10	15	45.4	76 0 32.4	55 43.0	1	
27	9	43	40.0	75 58 21.5	54 46.6	5	
28		5	37.0	55 57.4	53 43.1	1	
29		1	30.0	52 26.3	53 3.5	2	
30	9	54	25.3	48 17.8	52 7.3	7	
31	14	23	56.3	42 48.1	51 14.0	Merid. Circle.	
Nov. 2	9	6	21.7	75 32 52.0	50 2.0	1	
8	13	48	32.2	74 43 26.7	46 46.8	Merid. Circle.	
9		43	56.5	33 28.7	46 32.0	—	
10		39	18.7	22 58.4	46 21.7	—	
12	13	29	56.8	74 0 22.2	+ 13 46 8.6	—	

## IRIS.

## Observations.

MARKREE. Meridian Circle. { E. J. Cooper, Esq.  
& Mr. Graham.

Greenwich M. T.	R. A.	Decl.	Parallax.
	h m s	° ' "	
Aug. 21.435051	19 51 7.36	— 13 42 29.2	+ [9.9669] <i>p</i>
Sept. 11.372296	43 34.03	14 15 16.94	[9.9684]
29.326986	19 48 50.50	25 27.3	[9.9690] Good
Oct. 19.284242	20 5 58.33	6 20.5	[9.9680]
21.280346	20 8 13.83	— 14 2 21.3	+ [9.9678]

Sept. 11 2d and 3d wires, badly taken; mere glimpses of planet.

Oct. 19 6 wires, not good; planet faint.

21 7 wires, not good; planet faint.

## Equatoreal and Square-bar Micrometer.

Greenwich M. T.	R. A.	Parallax.	Decl.	Parallax.	No. Obs.
1847.	h m s		° ' "		
Aug. 19.515320	19 52 30.41	+ [8.2555] <i>p</i>	— 13 38 46.9	+ [9.9573] <i>p</i>	10
27.460530	47 29.65	[8.0450]	53 8.9	[9.9650]	10
28.455677	46 59.91	[8.0281]	13 55 2.0	[9.9650]	24
Sept. 10.431816	43 35.51	[8.1474]	14 14 17.3	[9.9645]	38
13.437374	43 37.54	[8.1474]	17 37.1	[9.9645]	35
18.415734	44 22.79	[8.1843]	21 58.7	[9.9638]	14
Oct. 9.333986	19 56 6.32	[7.8683]	20 30.2	[9.9674]	6
15.397950	20 1 48.97	[8.3955]	13 6.7	[9.9539]	7
16.352440	2 48.16	[8.1875]	11 31.7	[9.9631]	10
20.361227	20 7 10.70	+ [8.2827] <i>p</i>	— 14 4 17.5	+ [9.9598]	7